3A and 3B illustrate an exemplary operation of the embodiment shown in Fig. 2A. (Page 10, lines 19-23).

The pixel read section 2 inputs pixel data and outputs the data to the ΔΣ modulation signal processing section 3 in synchronization with a subframe pulse f_{SF}. (Page 9, lines 8-12). The integration section 31, 32, and 33 inputs the pixel data, compares the values of the pixel data with three threshold values, and generates a four value output based on the comparison. (Page 10, lines 12-14). Then, the encoder 34 converts the four value output input a binary value "L" and a binary value "S," and the values "L" and "S" correspond to the weights "a1" and "1," respectively. (Page 10, lines 14-18).

As shown in Figs. 3A and 3B, when the value "L" (corresponding to "a1") is OFF and the value "S" (corresponding to "1") is OFF, the drive output value in the light emission element equals "0." When the value "L" is OFF and the value "S" is ON, the drive output value in the light emission element equals "1." When the value "L" is ON and the value "S" is OFF, the drive output value in the light emission element equals "a1." When the value "L" is ON and the value "S" is ON, the drive output value in the light emission element equals "1+a1."

B. Illustrative, non-limiting embodiment shown in species II (*i.e.*, Fig. 2B)

Species II is similar to species I. However, in species I, the ΔΣ modulation signal processing section 3 comprises a first-order ΔΣ modulator, but in species II, the ΔΣ modulation signal processing section 3 comprises a second-order ΔΣ modulator. (Page 10, lines 2-8). However, the ΔΣ modulation signal processing section 3 in species I operates the same way as the ΔΣ modulation signal processing section 3 in species II in terms of the general operation described above.

C. Illustrative, non-limiting embodiment shown in species III (*i.e.*, Fig. 7A)

Fig. 7A shows another illustrative example of the configuration of the ΔΣ modulation signal processing section 3 of Fig. 1. Specifically, in the example, the processing section 3 comprises a distributor 35 and ΔΣ modulators 10 and 20. (Page 13, line 16, to page 14, line 2). Also, Figs. 8A and 8B illustrate an exemplary operation of the embodiment shown in Fig. 7A. (Page 14, lines 3-4).

In the embodiment, the pixel read section 2 inputs pixel data and outputs the data to the ΔΣ modulation signal processing section 3 in synchronization with a subframe pulse f_{SF}. (Page 9, lines 8-12). The distributor 35 inputs the pixel data and supplies values corresponding to the data to the modulators 10 and 20. (Page 13, line 23, to page 14, line 2). Then, the modulator 10 converts the value of the data into a binary value "OUTPUT1," and the modulator 20 converts the value of the data into a binary value "OUTPUT2." The values "OUTPUT1" and "OUTPUT2" correspond to the weights "a1" and "1," respectively. (Page 14, lines 3-7).

As shown in Figs. 8A and 8B, when the value "OUTPUT2" (corresponding to "a1") is OFF and the value "OUTPUT1" (corresponding to "1") is OFF, the drive output value in the light emission element equals "0." When the value "OUTPUT2" is OFF and the value "OUTPUT1" is ON, the drive output value in the light emission element equals "1." When the value "OUTPUT2" is ON and the value "OUTPUT1" is OFF, the drive output value in the light emission element equals "a1." When the value "OUTPUT2" is ON and the value "OUTPUT1" is ON, the drive output value in the light emission element equals "1+a1." (Page 14, lines 8-14).

D. Illustrative, non-limiting embodiment shown in species IV (*i.e.*, Fig. 7B)

Species III is similar to species IV. However, in species III, the ΔΣ modulation signal processing section 3 comprises first-order ΔΣ modulators 10 and 20, but in species IV, the ΔΣ modulation signal processing section 3 comprises a second-order ΔΣ modulator 10 and 20. (Page 13,

lines 16-22). However, the ΔΣ modulation signal processing section 3 in species III operates the same way as the ΔΣ modulation signal processing section 3 in species IV in terms of the general operation described above.

E. Non-limiting example of reading claim 2 on the species

1. Species I

Claim 2 reads on the illustrative, non-limiting embodiment of Species I (*i.e.*, Fig. 2A) in the following manner. Fig. 1 shows a light emission display drive apparatus that has a driver 4 being capable of performing control at three or more levels (*e.g.*, the levels "0," "1," "a1," and "1+a1") in an output brightness value of a light emission element in the display 5. Furthermore, the apparatus comprises a read section 2 and a ΔΣ modulation signal processing section 3.

The read section 2 reads the brightness value of the light emission element to be represented in a predetermined period. (Page 9, lines 8-12). The ΔΣ modulation signal processing section 3 converts the numeric value read by said read section 2 into distribution of occurrence probability at each level of the output brightness value at the three or more levels (Figs. 2A, 3A, and 3B; page 9, lines 17-22; and page 10, line 9, to page 11, line 5).

2. Species II

Claim 2 reads on the illustrative, non-limiting embodiment of Species II (*i.e.*, Fig. 2B) in the following manner. Fig. 1 shows a light emission display drive apparatus that has a driver 4 being capable of performing control at three or more levels (*e.g.*, the levels "0," "1," "a1," and "1+a1") in an output brightness value of a light emission element in the display 5. Furthermore, the apparatus comprises a read section 2 and a ΔΣ modulation signal processing section 3.

The read section 2 reads the brightness value of the light emission element to be represented in a predetermined period. (Page 9, lines 8-12). The $\Delta\Sigma$ modulation signal processing section 3 converts the numeric value read by said read section 2 into distribution of occurrence probability at each level of the output brightness value at the three or more levels (Figs. 2B, 3A, and 3B; page 9, line 22, to page 10, line 1; and page 10, line 9, to page 11, line 5).

3. Species III

Claim 2 reads on the illustrative, non-limiting embodiment of Species III (*i.e.*, Fig. 7A) in the following manner. Fig. 1 shows a light emission display drive apparatus that has a driver 4 being capable of performing control at three or more levels (*e.g.*, the levels "0," "1," "a1," and "1+a1") in an output brightness value of a light emission element in the display 5. Furthermore, the apparatus comprises a read section 2 and a $\Delta\Sigma$ modulation signal processing section 3.

The read section 2 reads the brightness value of the light emission element to be represented in a predetermined period. (Page 9, lines 8-12). The $\Delta\Sigma$ modulation signal processing section 3 converts the numeric value read by said read section 2 into distribution of occurrence probability at each level of the output brightness value at the three or more levels (Figs. 7A, 8A, and 8B; page 13, line 16, to page 14, line 14).

4. Species IV

Claim 2 reads on the illustrative, non-limiting embodiment of Species IV (*i.e.*, Fig. 7B) in the following manner. Fig. 1 shows a light emission display drive apparatus that has a driver 4 being capable of performing control at three or more levels (*e.g.*, the levels "0," "1," "a1," and "1+a1") in an output brightness value of a light emission element in the display 5. Furthermore, the apparatus comprises a read section 2 and a $\Delta\Sigma$ modulation signal processing section 3.